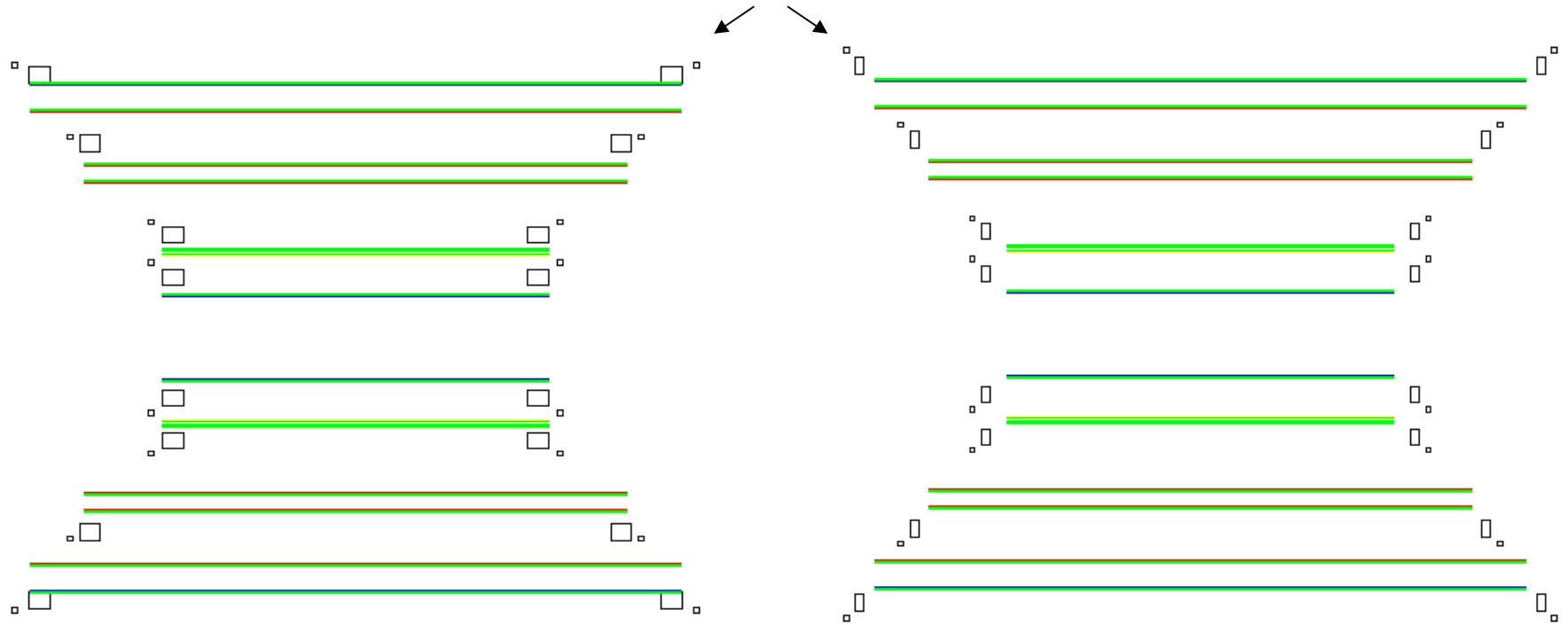# *SVX Simulation Status*

Maki Kurosawa (RIKEN)
for the PHENIX Collaboration

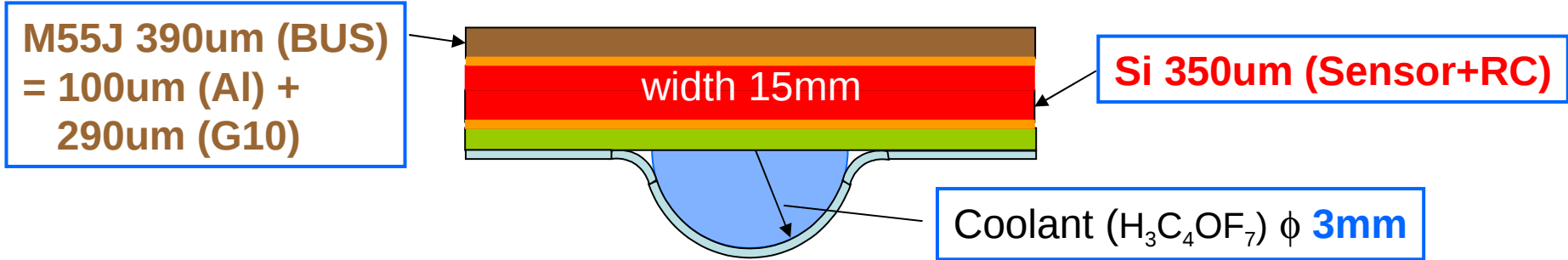## *1st Dec, 2008*

Support Ring

Support ring was moved out in z to correspond to the current best-known positions.

Support ring

Modification of BUS material for Pixel Layer

BUS : G10 (radl:19.4) → Polyimide (radl:28.6)

M55J 390um (BUS)
= 100um (Al) +
    290um (G10)

width 15mm

Si 350um (Sensor+RC)

Coolant ($H_3C_4OF_7$) ϕ **3mm**

Material (radl(cm))	Radiation Length (%)
Al (radl:8.9)	0.11 (100um)
G10 (radl:19.4) → polyimide (radl:28.6)	0.15 (290um) → 0.11 (290um)
Resin (radl:35.5)	0.06 (100+100um)
Si (radl:9.36)	0.37 (200um+150um)
Carbon Fiber (radl:26.6)	0.11 (300um)
M55J (radl:25.86)	0.19 (500um)
$H_3C_4OF_7$(radl:30.84) (ϕ2mm → ϕ3mm)	average 0.31 (940um)
Sum	1.30 → 1.26

total = 1.26 (%)

Comparison of Radiation Length (w/o beam pipe)

NOT applying acceptance cut.

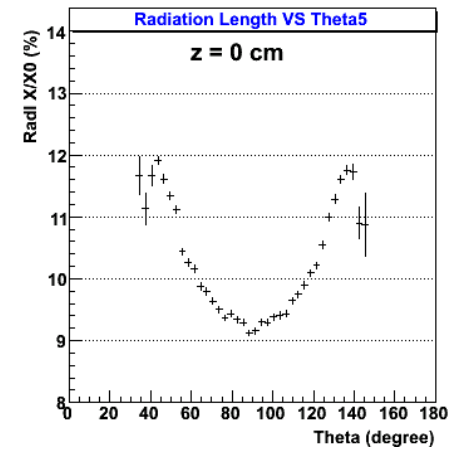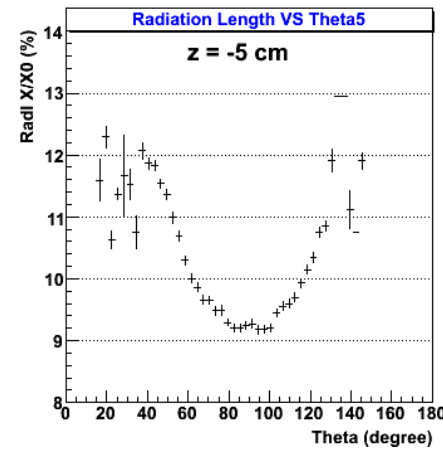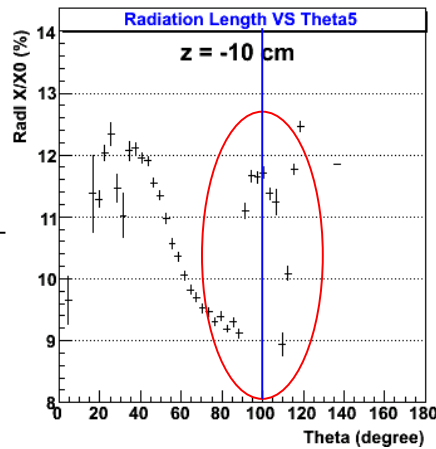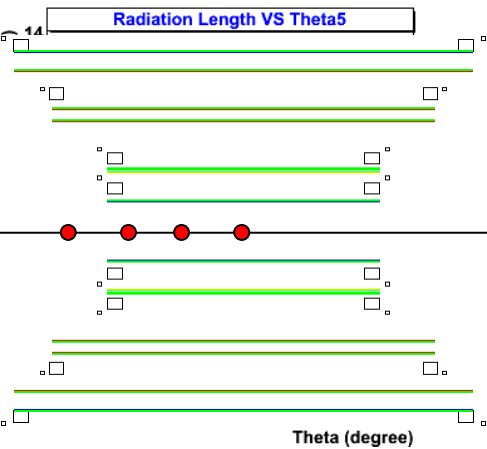0 < theta (degree) < 180
0 < phi (degree) < 360
-15 < Vertex_z (cm) < 0
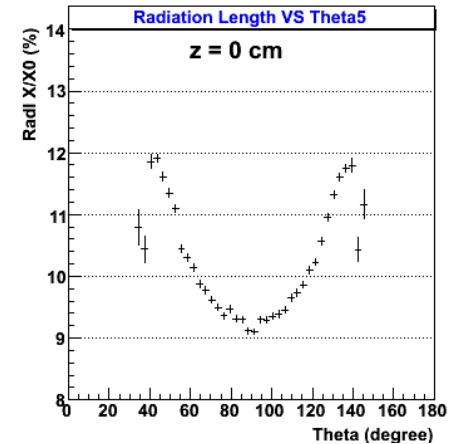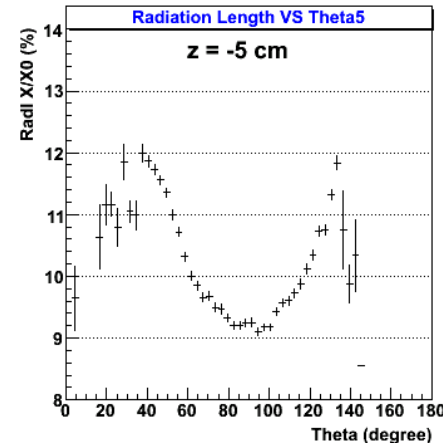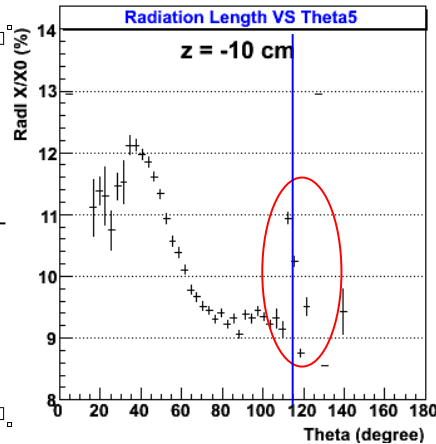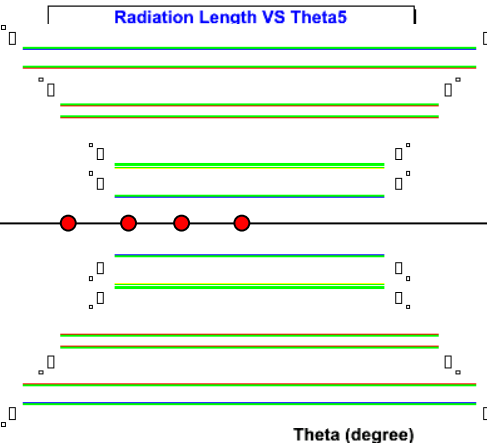
Comparison of Radiation Length (*w/o beam pipe*)

NOT applying acceptance cut.

0 < theta (degree) < 180
0 < phi (degree) < 360
+5 < Vertex_z (cm) < +15
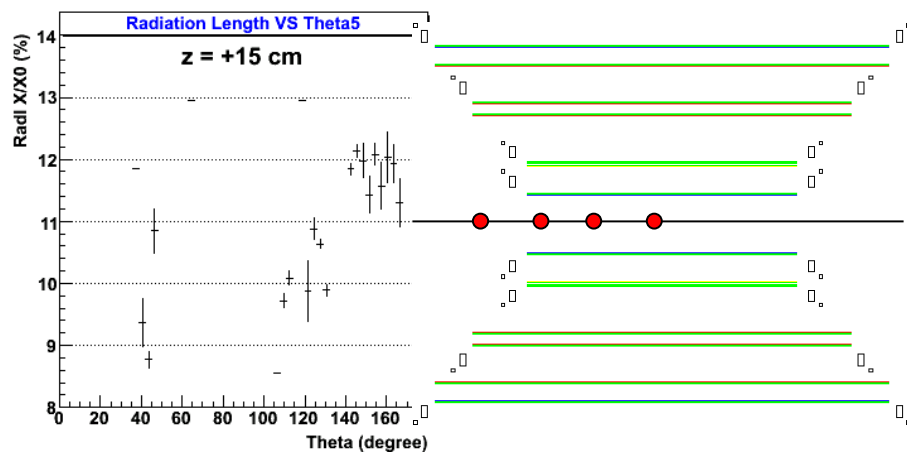
back up slides

Comparison of Radiation Length (w/o beam pipe)

NOT applying acceptance cut.

0 < theta (degree) < 180
0 < phi (degree) < 360
-15 < Vertex_z (cm) < 0
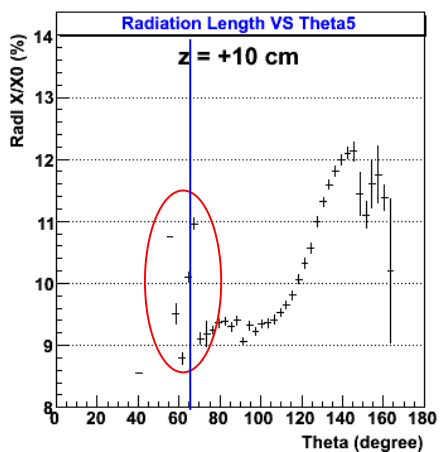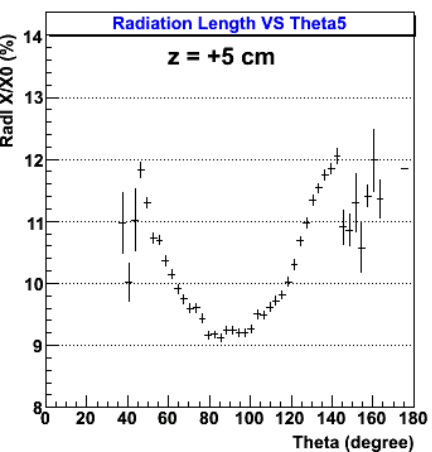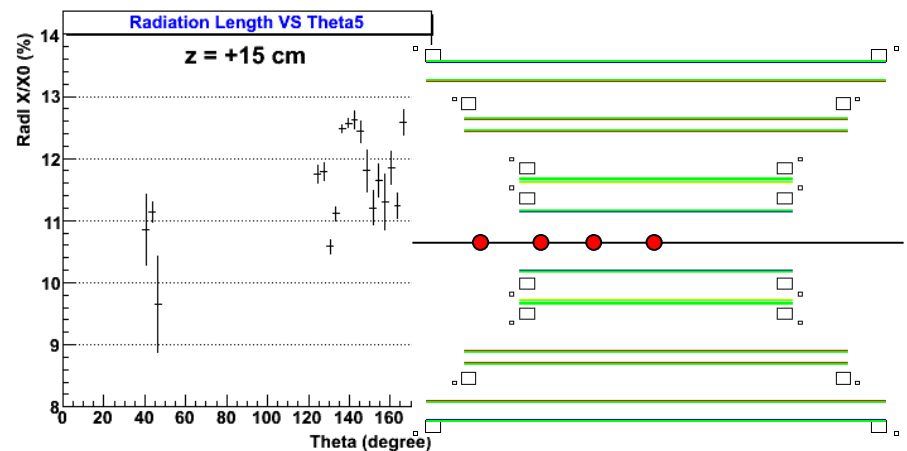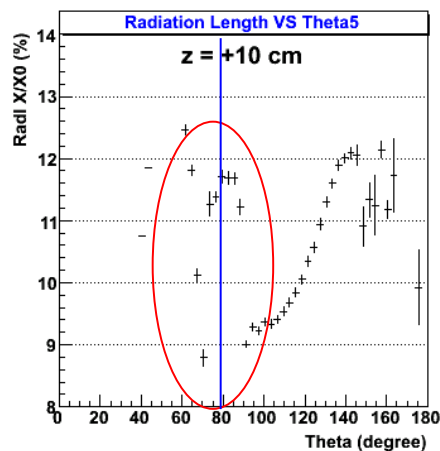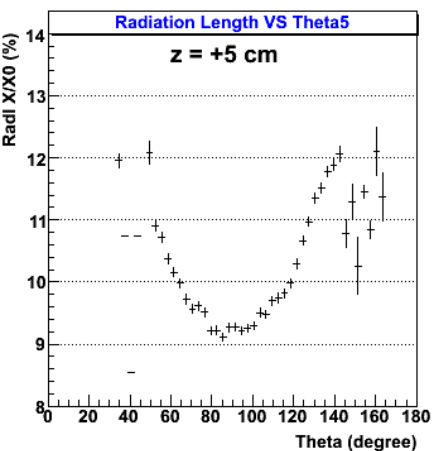
Comparison of Radiation Length (w/o beam pipe)

NOT applying acceptance cut.

0 < theta (degree) < 180
0 < phi (degree) < 360
+5 < Vertex_z (cm) < +15